

**DOCKET NO. D-1999-064 CP-2**

**DELAWARE RIVER BASIN COMMISSION**

**Village of Deposit**

**Groundwater Withdrawal**

**Village of Deposit, Broome and Delaware Counties, New York**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Village of Deposit on June 21, 2010 (Application) for renewal of an allocation of groundwater and review of an existing groundwater withdrawal project previously approved by the DRBC on July 26, 2000. The Application also requested approval of the bulk sale of water for use in natural gas development activities within the basin. On October 10, 2011, the Village of Deposit submitted pumping test data completed at Well No. 2 and requested an increase in the well's individual well allocation that was requested in the original Application. In a letter dated January 9, 2012, the Village of Deposit requested that the bulk sale of water for use in natural gas development activities be withdrawn from the application and that Commission staff proceed only with the renewal of the existing groundwater withdrawal. The project wells were originally approved by the New York State of Environmental Conservation (NYSDEC) on May 26, 2000, (Permit No. 4-1230-00091/00001). The NYSDEC is expected to issue a revised water supply permit (Permit No. 7-0342-00203/00001 (WSA 11,576) approving an increase in the current capacity of Well No. 2.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Delaware County Planning Department has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on March 7, 2012.

**DESCRIPTION**

**1. Purpose.** – The purpose of this project is to approve the renewal of an existing groundwater withdrawal project to supply up to 15.5 million gallons per month (mgm) of water to the docket holder's public water system from Wells Nos. 1, 2, 4, and 5. Well No. 3 is no longer in service and approval for use has been removed by this docket. The previous docket provided a peak month allocation of 30 million gallons per 30 days (mg/30 days) and an average

annual allocation of 15 mg/30 days. Although the maximum allocation provided in this docket is a reduction in the peak monthly allocation from the previous docket, the allocation meets the 10-year projected water demand and is consistent with the NYDEC Water Supply permit annual average allocation of 0.5 mgd. This docket also establishes individual well allocations, which are based on NYSDEC approved well capacities as listed in the water supply permit.

**2. Location.** The project wells are located in the West Branch Delaware River Watershed in the Village of Deposit, Broome and Delaware Counties, New York. Wells Nos. 1, 2, and 4 are screened in unconsolidated glacial outwash deposits and well No. 5 is an open rock borehole cased into the Devonian-aged Upper Walton Formation. The project wells and service area are located within the drainage area to the section of the non-tidal Delaware River known as the upper Delaware, which is designated as Special Protection Waters.

Specific location information has been withheld for security reasons.

**3. Area Served.** The Village of Deposit Water Distribution System serves water to the Village of Deposit and an industrial zone south of the Village, east of the West Branch Delaware River as shown the map entitled “Village of Deposit Water System Service Area” submitted as part of the application.

**4. Physical features.**

**a. Design criteria.** The Village’s distribution system supplies water to an estimated population of 3,200 via 651 domestic and commercial connections. The present average and maximum groundwater demand for this project are 0.236 mgd (7.316 mgm) and 0.389 mgd (12.059 mgm), respectively. The docket holder estimates an increase in average and maximum demand over the next ten years. The projected average and maximum demand is estimated to be 0.263 mgd (8.153 mgm) and 0.432 mgd (13.392 mgm), respectively. Although less than requested, the allocation of 15.5 mgm should be sufficient to meet the future demands of the Village of Deposit public water supply system and will ensure that that the NYSDEC average annual allocation of 0.5 mgd is not exceeded.

**b. Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	SCREENED INTERVAL	PUMP CAPACITY	YEAR DRILLED
1	140’	87’/6”	87 - 106’	180 gpm	1968
2	101’	81’/8”	81 - 101’	400 gpm	1972
4	120’	111’/10”	111 - 116’	500 gpm	1985
5	500’	138’/10”	Open rock	125 gpm	1999

All wells and water service connections are metered.

Well water is chlorinated prior to entering the distribution system.

Wells Nos. 1, 2, and 4 are located in the 100-year floodplain of Oquaga Creek or the West Branch Delaware River. Well No. 5 is located outside of the 100-year floodplain. Wells Nos. 1 and 2 are flood-proofed by seals installed between the motor baseplates and concrete mounting pads. Well No. 4 is protected from the 100-year flood by a flood protection dike on Big Hollow Creek.

The distribution system is not interconnected with any other distribution system.

c. **Other.** Wastewater is conveyed to the Village of Deposit sewage treatment facility most recently approved by DRBC Docket No. D-1974-057 CP-2 on December 12, 2006. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. **Cost.** The overall cost of this project is estimated to be \$17,000.

e. **Relationship to the Comprehensive Plan.** The Village of Deposit Wells Nos. 1, 2, 3 and 4 were included in the Comprehensive Plan by Docket No. D-86-29 on May 28, 1986. Well No. 5 was added to the Comprehensive Plan by Docket No. D-99-64 CP on July 26, 2000. Well No. 3 will be removed from the Comprehensive Plan as part of this docket action.

### **FINDINGS**

The Application submitted by Village of Deposit to the Commission on June 21, 2010 requested a renewal of the existing groundwater withdrawal project and included a request for approval of up to 0.2 mgd of water for sale to the natural gas industry. On October 10, 2011, the Village of Deposit submitted additional information to the Commission pertaining to the bulk water sales, data from a pumping test completed on Well No. 2, and requested an increased individual well allocation for Well No. 2. At the December 8, 2011 DRBC meeting, the Commissioners unanimously approved a Resolution for the Minutes that stated:

“Until the State of New York notifies the Commission that the State has completed its environmental impact review process with respect to potential adverse impacts associated with high volume hydraulic fracturing for natural gas development, the Delaware River Basin Commission will postpone consideration of applications for the approval of water withdrawals within the State of New York to serve “high volume hydraulic fracturing” as New York State defines that term.”

The resolution for the minutes was in response to the NYSDEC Commissioner Joseph Martens letter dated May 31, 2011 requesting such postponement of all DRBC natural gas related water withdrawal reviews that are located in the State of New York.

By letter dated January 9, 2012, the Village of Deposit withdrew the request for the Commission’s approval of the bulk sale of water to the natural gas industry and requested that the Commission proceed only with the approval of the existing groundwater withdrawal project that provides water to the village residents.

In its Application, Village of Deposit requested an allocation of 30 mg/30 days (1 mgd), which is the same peak monthly allocation that was provided in the previous docket. However, the estimated ten-year projected maximum water use as stated in the Application is 0.432 mgd, which equates to 13.4 mgm. As the Commission bases water allocations on ten-year projected maximum use estimates, with some minor flexibility for municipal public water purveyors, the allocation of 15.5 mgm (0.5 mgd) granted herein satisfies the docket holder's ten year projected maximum use and is consistent with NYSDEC average annual allocation of 0.5 mgd.

This project consists of an existing withdrawal of groundwater from Wells Nos. 1, 2, 4, and 5. This docket establishes individual well allocations that are based on NYSDEC permitted well capacities. These rates are provided in Condition II.d. in the Decision Section of this docket. With the exception of Well No. 2, which was increased from 175 gpm to 325 gpm, all individual well capacities are the same rates as previously approved by NYSDEC.

Beginning on May 10, 2011, Deposit Well Drilling performed a pumping test on Well No. 2 to determine if the well could produce and be permitted at a higher pumping rate. The well was pumped at a constant rate of 325 gpm for a 72 hour period. At the start of the pumping test, the static water level in Well No. 2 was 19 feet below top of casing (btoc). At the end of the pumping test the water level was steady at 50 feet btoc (total drawdown of 31 feet). Approximately 99 percent of the drawdown occurred during the first hour of the pumping test. At the conclusion of the pumping test, the water level in Well No. 2 recovered to its starting water level of 19 feet btoc within 6 minutes.

During the pumping test, water levels were measured in observation well (Well No. 1) located approximately 525 feet from Well No. 2, and at two staff gages, which were installed in Oquaga Creek. Oquaga Creek is located approximately 420 feet southeast of well No. 2. The water levels measured in the observation well were steady at 5.25 feet btoc during the entire Well No. 2 pumping period. Based on a static water level of 5 feet btoc, measured 10 minutes prior to the start of the pumping test, drawdown in observation well No. 1 was limited to approximately 0.25 feet.

During the 72-hour pumping test period, the water level in Oquaga Creek declined a total of 2 inches as measured at both staff gages. The narrative report indicates that the decline in stream levels during the testing period is likely due to the natural decline of stream levels which were elevated from precipitation events that occurred the week prior to the start of the pumping test. Streamflow records from other stream gages in the area show a declining trend during the same period which lends some support to the consultant's conclusion that the decline was related to natural conditions in the area.

The docket holder must submit a stream monitoring plan to the Commission within 60 days of the approval of this docket. The purpose of the monitoring is to affirm that the withdrawals did not have any measurable influence on the streamflow in Oquaga Creek. The withdrawal for Well No. 2 is limited to 125 gpm until the stream monitoring plan is approved in writing by the Executive Director. If it is determined that the operation of the well influences

water levels in the stream, the Docket Holder will be required to develop a withdrawal operations plan that includes provisions for maintaining an adequate passby flow assigned by the Executive Director. Condition II.g in the Decision Section of this Docket requires that the docket holder submit a stream monitoring plan for Commission approval.

### **Special Protection Waters**

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of Special Protection Waters. The wells providing water supply to the Village of Deposit are located within in the drainage area to the Special Protection Waters. The project entails a renewal of an existing groundwater withdrawal project with an increase in the NYSDEC permitted capacity of one well (Well No. 2). No upgrades or new construction is proposed at Well No. 2. Since this renewal project does not entail additional construction and expansion of facilities or service areas (i.e., there aren't any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time.

However, the Application did indicate that the Village will be replacing a circa 1880's cast iron waterline with a new water line installed along Wheeler Street. The pipeline replacement project has been recently funded and the Village is in the process of procuring an engineer to provide design services per the funding requirements.

### **Flood Plain Regulations**

Well Nos. 1, 2, and 4 are existing wells that are located within the 100-year floodplain. Wells Nos. 1 and 2 have been flood proofed using wellhead seals located between the motor baseplates and the concrete mounting pads. Well No. 4 has been flood proofed by the construction of a flood protection berm. The project complies with the DRBC, *Administrative Manual – Part III, Basin Regulations – Floodplain Regulations*.

**Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd**

Section 2.1.8 of the Water Code states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). The results of the first annual water audit shall be submitted to the Commission by March 31, 2013. Subsequent annual water audits shall be submitted annually to the Commission by March 31 every year thereafter.

**Other**

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project is designed to conform to the requirements of the Ground Water Policy of the DRBC.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

**C. DECISION**

I. Effective on the approval date for Docket No. D-1999-064 CP-2 below:

a. The projects described in Docket No. D-99-64 CP are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1999-064 CP-2; and

b. Docket No. D-99-64 CP is terminated and replaced by Docket No. D-1999-064 CP-2.

c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. The docket holder shall register with and report to the NYSDEC all surface and ground water sources described in this docket.

b. The wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the combined withdrawal from all well sources shall not exceed 15.5 million gallons. No well shall be pumped above the maximum instantaneous rate or the individual monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
No. 1	140 gpm	6.250
No. 2	325 gpm <sup>(1)</sup>	14.508
No. 4	475 gpm	15.500
No. 5	125 gpm	5.580

<sup>(1)</sup> See Condition II.g

e. The wells shall be equipped with readily accessible capped ports and minimum ½-inch inside diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and minimum ½-inch ID drop pipes as repairs or modifications are made at each existing well.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the NYSDEC and shall be available at any time to the Commission if requested by the Executive Director.

g. Within 60 days of the approval date of this docket, the docket holder shall submit a Stream Monitoring Plan to the DRBC. The withdrawal rate at Well No. 2 is limited to a rate of 175 gpm until the docket holder has received the Executive Director's written approval of the Stream Monitoring Plan. The Stream Monitoring Plan shall include procedures for metering, recording, and reporting streamflow measurements in Oquaga Creek and provide a description of the evaluation procedures that will be used to determine if the withdrawals at Well No. 2 have any measurable influence on streamflow.

h. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

i. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the NYSDEC, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

j. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the Water Code, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. The results of the first annual water audit shall be submitted to the Commission by March 31, 2013. Subsequent annual water audits shall be submitted annually to the Commission by March 31 every year thereafter.

k. The docket holder shall implement to the satisfaction of the NYSDEC, the continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the NYSDEC on the actions taken pursuant to this program and the impact of those actions as requested by the NYSDEC.

l. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

m. The docket holder shall continue to implement its Water Conservation Plan as approved by NYSDEC, and shall report to the NYSDEC on actions taken pursuant to this program and the impact of those actions as requested by the NYSDEC.

n. The docket holder shall implement to the satisfaction of the NYSDEC, a drought or other water supply emergency plan.

o. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

p. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

q. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.



r. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

s. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

t. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

u. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

v. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

w. For the duration of any drought emergency declared by either New York or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of New York, to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

x. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area or new development is in compliance with a DRBC approved NPSPCP.

y. Renewal of this docket does not resolve violations, if any, by the docket holder that may have occurred prior to this renewal or that may be ongoing (“prior or ongoing violations”) of provisions of the Delaware River Basin Compact (“Compact”) or of any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or ongoing violations.

z. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE: March 7, 2012**

**EXPIRATION DATE: March 7, 2022**